



Food Pyramid suggested by National Institute of Nutrition

Healthy and Balanced Diet – A healthy diet consumed throughout the life-course helps in preventing malnutrition in all its forms as well as wide range of non-communicable diseases (NCDs) and conditions, and A balanced diet is one which contains variety of foods in such quantities and proportion that the need of all nutrients is adequately met for maintaining health, vitality and general wellbeing and makes a small provision for extra nutrients to withstand short duration of leanness. Healthy diets contains -

- Energy rich foods (Carbohydrates and fats)-whole grain cereals, millets, vegetable oils, ghee, nuts and oilseeds and sugars.
- Body building foods (Proteins)- Pulses, nuts and oilseeds, milk and milk products, meat, fish, poultry.
- Protective foods (Vitamins and minerals) - Green leafy vegetables, other vegetables, fruits, eggs, milk and milk products and flesh foods.

DIET DURING DIFFERENT STAGES OF LIFE

➤ Diet for an Infant :

- ✚ Infants should be breastfed exclusively during the first 6 months of life.
- ✚ Infants should be breastfed continuously until 2 years of age and beyond.
- ✚ From 6 months of age, breast milk should be complemented with a variety of adequate, safe and nutrient dense complementary foods such as cereals (wheat, rice, jowar, bajra etc.), pulses (grams/dals), nuts and oilseeds (groundnut, sesame etc.), oils (groundnut oil, sesame oil etc.), sugar and jaggery.
- ✚ They should be fed small quantities at frequent intervals (3-4 times a day). Also, the food should be of semi-solid consistency so that the infants can swallow it easily.

➤ Diet for a Growing Child :

- ✚ Because bone density is developing at this time, dairy products (milk, cheese, yoghurt) and calcium-rich vegetables such as spinach, broccoli and celery are essential.
- ✚ For energy, children require a sufficient amount of carbohydrates and lipids. As a result, it is critical to provide children with energy-dense meals such as whole grains (wheat, brown rice), nuts, vegetable oils, vegetables such as potatoes and sweet potatoes, and fruits such as bananas on a daily basis.
- ✚ Proteins are necessary for muscle growth, healing, and growth in children, as well as the development of antibodies. So feed them a diet rich in meat, eggs, fish, and dairy.
- ✚ Vitamins are required for a child's body to function properly and for the immune system to be strengthened. In a child's diet, a variety of fruits and vegetables of various colours should be

included. Vitamin A is necessary for eyesight, and a lack of it can cause night blindness (difficulty in seeing in night). Vitamin A is found in dark green leafy vegetables, yellow and orange coloured vegetables and fruits (such as carrots, papaya, and mangoes).

- ✚ Vitamin D promotes bone growth and development and is required for calcium absorption. The majority of Vitamin D is obtained through sunlight, with a minor amount obtained from foods such as fish oils, fatty fish, mushrooms, cheese, and egg yolks.
- ✚ Teenage girls experience more physiological changes and psychological stress than boys because of onset of menarche (onset of menstruation). Therefore, teenage girls should eat diet which is rich in both vitamins as well as minerals to prevent anemia.

➤ **Diet for Pregnant and Lactating Mother :**

- ✚ Calcium supplementation is necessary during pregnancy and lactation for the appropriate construction of the baby's bones and teeth, the secretion of calcium-rich breast milk, and the prevention of osteoporosis in expectant and nursing moms. As a result, calcium-rich foods such as milk, yoghurt, cheese, green leafy vegetables, legumes, and seafood should be included in their diet. Vitamin A is essential during nursing in order to increase the chances of a child's survival. Aside from these, nutrients such as Vitamin B12 and C must be consumed by the breastfeeding mother.
- ✚ Iron is required for haemoglobin formation as well as disease immunity. Anemia is caused by an iron deficiency. Iron deficiency is widespread, especially among pregnant women and children. Maternal mortality and low birth weight newborns are linked to iron insufficiency during pregnancy. Iron is found in

plant foods such as green leafy vegetables, legumes, and dry fruits. Iron can also be derived from animal products such as meat, fish, and poultry. For enhanced iron absorption, eat vitamin C-rich foods including gooseberries (amla), guava, oranges, and other citrus fruits.

- ✚ Iodine shortage during pregnancy causes stillbirths, abortions, and cretinism, so make sure to eat iodized salt.

➤ **Diet for an Adult Male & Female :**

- ✚ Fruits, vegetables, legumes (e.g. lentils, beans), nuts and whole grains (e.g. unprocessed maize, millet, oats, wheat, brown rice).
- ✚ At least 400grams (5 portions) of fruits and vegetables a day. Potatoes, sweet potatoes, cassava and other starchy roots are not classified as fruits or vegetables.
- ✚ Unsaturated fats (e.g. found in fish, avocado, nuts, sunflower, canola and olive oils) are preferable to saturated fats (e.g. found in fatty meat, butter, palm and coconut oil, cream, cheese, ghee and lard). Industrial trans fats (found in processed food, fast food, snack food, fried food, frozen pizza, pies, cookies, margarines and spreads) are not a part of a healthy diet.
- ✚ Less than 5 g of salt (equivalent to approximately 1 teaspoon) per day and use iodized salt.

➤ **Diet for Elderly People :**

- ✚ As lean muscle mass and physical activity decline with age, elderly or elderly persons require less calories. To prevent age-related degenerative diseases and promote healthy ageing, seniors require additional calcium, iron, zinc, vitamin A and antioxidants.
- ✚ An elderly person's diet should be well-cooked, soft and low in salt and spice. To avoid dehydration and constipation, consume

modest amounts of food at more frequent intervals and drink water at frequent intervals.

- ✚ Seniors frequently complain of a loss of appetite or trouble chewing. Elders should be fed a soft diet that includes fruits and vegetables. To preserve bone health and avoid osteoporosis and bone fractures, calcium-rich foods such as low-fat dairy products, toned milk, and green leafy vegetables should be included in the daily diet. Pulses, toned milk, egg whites, and other protein-rich foods should be consumed in large quantities. Saturated fats, sweets, fatty foods, salt, and sugar should all be avoided by the elderly. Ghee, oil and butter should be avoided at all costs. Also stay away from spicy foods.

ROLE OF DIFFERENT KINDS OF FOOD MATERIAL ON HEALTH

➤ Vegetables and fruits in diet :

Micronutrients (iron, calcium, vitamin C, folic acid, carotenoids, and phytochemicals) and macronutrients (complex carbohydrates/fiber) are abundant in vegetables and fruits.

Some fruits and vegetables have very few calories, whereas others have a lot of calories because they are high in starch (such as potato, sweet potato, fruits as banana). As a result, vegetables and fruits can be employed to boost or lower calorie intake.

An individual's diet should include at least 400 grammes (5 servings) of fruits and vegetables every day.

➤ Different kinds of Fats/oils :

Fats and oils are concentrated energy sources. Fat sources in the diet are categorised as follows:

Animal Fat - Ghee, butter, milk, cheese, eggs, and meat and fish fat are all good sources of animal fat. They're heavy in saturated and trans fatty acids, and they're high in cholesterol.

Plant Fat - Seeds of some plants, such as peanut, mustard, sesame, coconut, canola, olive, and soya bean, are sources of vegetable oils. Fats should account for 15-30% of total calories in the diet, according to experts. To meet their higher energy needs than adults, infants and children's diets should include appropriate fats.

➤ **Salt (sodium and potassium) intake :**

Salt is an important dietary component. The majority of individuals are unaware of how much salt they consume. High salt intake and low potassium intake (less than 3.5 g) both lead to high blood pressure, which raises the risk of heart disease and stroke. The World Health Organization (WHO) recommends that people consume no more than 5 grammes of salt each day.

➤ **Sugars :**

Sugars added to foods or drinks during cooking, by the producer or by the consumer, as well as sugars naturally found in honey, syrups, fruit juices, and fruit juice concentrates, are all considered free sugars. Free sugars raise the risk of dental caries (tooth disease) and can contribute to obesity and overweight. Free sugars should not account for more than 10% of total energy consumption.

➤ **Whole grains :**

The bran, germ, and endosperm are all edible portions of the grain in a whole grain. Whole grains (whole wheat, brown rice, oats, unprocessed maize, millets) have been demonstrated to lower the risk of heart disease, type 2 diabetes, obesity, and certain types of cancer. Whole-grain diets also help to maintain regular bowel

movements and encourage the growth of beneficial bacteria in the colon.

